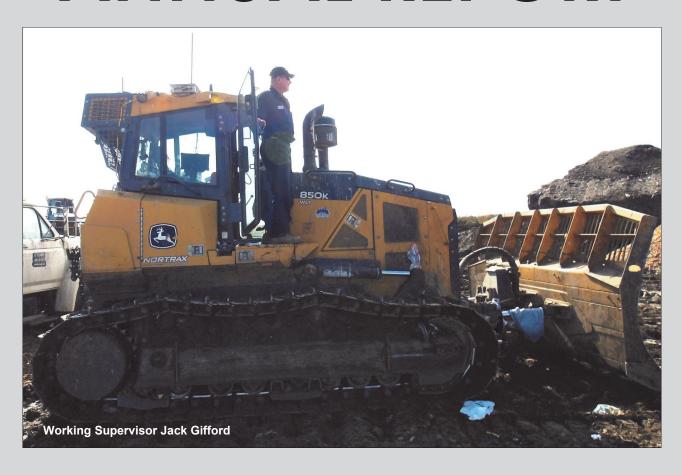
2020 ANNUAL REPORT



Prepared By:

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Fulton County Dept. of Solid Waste

Johnstown, New York

Fulton County Department of Solid Waste **Annual Report** 2020

Prepared For: Fulton County Board of Supervisors and the 2021 Public Works Committee

Greg Fagan, Chairman Todd Bradt, Vice Chairman John Blackmon **Sheila Perry** Heather VanDenburgh **Jack Wilson Gregory Young**

Department of Solid Waste Staff

Administrative

Director: David Rhodes

Deputy Director of Administration: Cindy G. Livingston

Deputy Director of Operations: Jeffrey Hertik

Principal Account Clerk: Patricia Markes-Roennpagel Account Clerks: Connor Askew, Cynthia Wesselmann

Recycling Division

Recycling Coordinator: Dianne Woske Working Supervisors: Joseph Orlando, Daniel

Kovalovich

Auto Mechanic: Greg Perron

HEO: Jonathan Teale

MEOs: Cory Bartlett, Frank Ballou Jr.

Skilled Laborers: Rory Baker, Brian Bicheler, Dona Gisondi, Kevin Green, Robert Manchester, Sandra Rogers MEOs: Andrew Bornt, Daniel Slade

Auto Mechanic Helper: David Malagisi

Landfill Division

Operations Manager: Luke Case

Environmental Technician: Alexandra Miller **Equipment Maintenance Supervisor:** Eric Ellis Auto Mechanics: Edward Seeley, Stephen Solar

Weigh Scale Operator: Matthew Towne Working Supervisor: Jack Gifford Maintenance Mechanic: Erik Dutcher **HEOs:** Joshua Barker, Andrew Bochenek,

Danny Ellis, Thomas Hogan

Skilled Laborers: Dustin Calhoun, Jeffrey Reynolds,

Matthew Wandel

Transfer Haul Division

HEO: L. J. Anderson

Laborer: Jon Bronk

Executive summary

2020 was a year of unprecedented challenges at the Fulton County Department of Solid Waste. While it began full of promise for another productive year, by March we were dealing with COVID-19, staffing reductions and a hold on major purchases. Despite these challenges the Department continued to provide waste disposal and recycling to the residents of Fulton County. The only interruptions in service were the cancellation of

spring clean-up programs, the latex paint exchange and suspension of curbside recy-

cling for one week.

2020 was the tenth full year of production of electricity from the Landfill Gas-to-Electric plant at the Fulton County Solid Waste Department, resulting in over \$2.4 million overall revenue in electric sales in 10½ years.

The 2020 Out-of-County ADC (Alternate Daily Cover) contract category brought in 2,646 tons of contaminated soils (in lieu of utilizing additional cover soil which provides no revenue gains). In-county soils were 1,637 tons for the year.

2020 was the second year of a contract with Hamilton County to accept their solid waste. The Towns of Day, Edinburg; and the Onondaga County Resource Recovery Agency also contracted with Fulton County in 2020.

The Hamilton County contract brought in 6,005 tons of material. The contract allowing Out-of-County waste from permitted haulers brought in an additional 6,136 tons of material.

The Villages of Schuylerville, Schoharie and Canajoharie contracted with Fulton County for sludge disposal. The Out-of-County sludge contracts brought in 4,595 tons in 2020.

A category for large loads (25 tons or greater) of municipal solid waste brought in 51,833 tons for the year. Out of County large loads brought in over \$2.3 million in revenue

In 2020 the Fulton County Demolition Team performed 6 demolitions and assisted the City of Gloversville in the clean-up of 70 Division Street.

The landfill staff completed DEC required cleaning of the leachate collection systems, leachate tank cleanings, and servicing of the air system.

The department collected 2,451 tons of single stream recy-

cling in 2020. Continuing successful programs include the Electronics and Textile Drop-offs, which are available at all eight transfer stations.

The Department of Solid Waste received grants this year totaling \$33,010 from NYSDEC for the last three quarters of 2019 for recycling education. The Department continues to pursue

a large request (for \$981,051) for equipment, trucks, compactors, and promotional and education costs expended during the switch to Singlestream Recycling, as well as a recycling education grant for 2020.

Recycling revenue of \$152,930 was reported in 2020. This increase of \$112,987 from 2019's total was due to slight improvements in recycling markets and a larger quantity of bulky metal than usual. The Department of Solid Waste has received over \$8.8 million in revenue for the sale of recyclable materials since its inception.

In 2020 the Department of Solid Waste utilized 167,641 cubic yards of space for the 145,563 tons of refuse and cover received. The landfill compaction rate was 1,736 #/CY.

The History of the Fulton County Department of Solid Waste

The Fulton County Department of Solid Waste has been in operation for 31½ years and has received a total of 3,215,442 tons of refuse. In the 1980's, Fulton County developed a strategy to address the Solid Waste needs of the community. By 1989 Fulton County had created a state of the art landfill, located in the Town of Johnstown. The Fulton County site was approved for

105 acres overall landfill footprint. Currently, 47.9 acres are lined and the county has invested almost \$52 million in facilities and infrastructure. This includes a Materials Recovery Facility, eight transfer stations and a Landfill Gas to Electric facility. The department is responsible for all permits and regulatory compliance requirements to ensure environmental protection.

County **Contributions**

The Department of Solid Waste is set up as an Enterprise Fund, established to raise all necessary funds to finance its entire operations.

The Department receives no tax dollars from the County. Tipping fees are established and charged to facility users for all waste received and hauled.

All municipalities are customers of this operation, and as such, the tonnage hauled from the municipalities is billed back at the designated per ton charge, which

pays for utilization of departmental services.

State required reserve accounts are designated for future expansions, gas projects, equipment purchases, capping of the landfill and future environmental monitoring. This approach has allowed the County to provide a wide range of services, maintain its fleet of equipment, and plan ahead for necessary projects in a self-sufficient manner, all without borrowing funds. All capital costs are paid for with departmental reserves and do not impact the County budget.

Annually, the Department of Solid Waste contributes \$350,000 Administrative Payment to the overall County budget, as well as services and equipment to assist in the reduction of various county departmental expenses.

DSW Staff -

The Department of Solid Waste full-time staff of 39 continues to provide a multitude of services, which include operating a comprehensive solid waste and recyclables management program for the county, as well as extending itself for in-house projects and co-operative efforts with other municipalities, such as clean up programs. There are also 11 part-time transfer station attendants and four supplemental employees within the department.

2020 marked the retirement of long time employees: MEO Vicky Dutcher, HEO Nick Passero, and transfer station attendant Larry Johnston.



Weigh Scale Operator Matthew Towne, on the job during the COVID-19 pandemic.

GRANT HISTORY -

The Department of Solid Waste continues to monitor submitted grants awaiting payment or submission approval with the State DEC.

A total of \$33,010 was received by the DSW in 2020, which covered a portion of expenses for recycling education, promotions, advertising and the Recycling Coordinator's salary and benefits during 2019. The De-

partment is approved for 50% reimbursement of up to \$100,000 for these costs in 2020.

Pending grants include a Recycling Education grant, for 2020 expenses; recycling equipment; and costs for the 2021 Household Hazardous Waste event in August. To date, the Fulton County Department of Solid Waste has received \$4,091,077.91 in grants.

Successful Programs ———

- Singlestream Recycling
- Yard Waste Composting
- Electronics Collection
- Fluorescent Bulb Drop-Off
- Rechargeable Battery Drop-Off
- Mercury Thermostat Drop-Off
- Propane Tank Drop-Off
- Textile/Clothing Collection
- Small Business Recycling and Non Alternate Daily Cover Materials -Profit Recycling Programs
- Demolition Team
- Metal Processing

- Equipment Sharing
- Clean Wood/Clean C&D Disposal
- Financial Contributions to the County
- Municipal Clean-ups

Sanitary Landfill

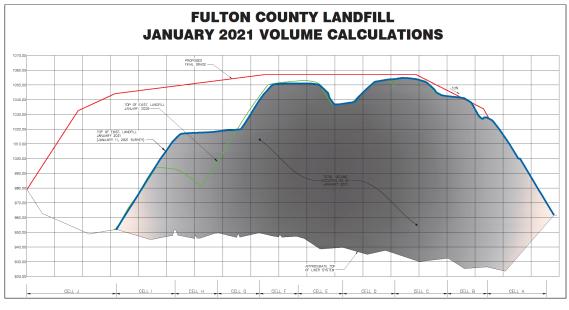
In 2020, a total of 141,277 tons of refuse, and 4,286 tons of contaminated soil/ADC, were brought into the facility, delivered by 17,853 separate truckloads, (an average of 8.2 tons/load). See tonnage breakdown below:

The Department of Solid Waste averaged 578 tons per day in 2020.

The Out-of-County, Large Load category continues to be extremely beneficial in assisting the overall operations of the landfill, bringing in almost \$2.4 million in revenue for 2020.

To date, the Department of Solid Waste has received over \$35.7 million in revenue from Out-of-County sources.

2018-2019-2020 Tonnage Comparison					
	Tons 2018	Tons 2019	Tons 2020		
Asbestos	1,349.6	1,059.1	2,380.3		
Construction & Demolition Debris (including: Commercial C&D, County Transfer Haul C & D, Municipal C & D, County Demoli- tion Team C & D)	8,545.1	8,413.5	8,657.9		
Commercial	23,996	22,536.7	17,874		
County Transfer Haul	9,429.5	9,740.1	9,305.7		
Industrial Wet	1,268.9	1,443.2	1,042.1		
Industrial Dry	5,117.1	4,548.0	3,846.8		
Municipal Direct Haul	11,046.6	11,182.5	12,317.2		
GJWWTF & Municipal Sludge	20,447.8	18,622.8	16,952.2		
Contaminated Soil (In-County)	8,339	492.6	1,637.0		
Clean Up Program	225.7	254.9	170.5		
Out-Of-County Waste (All)	59,641.7	69,224.8	71,375.9		
Total Incoming Tonnage	149,407	147,518	145,563		



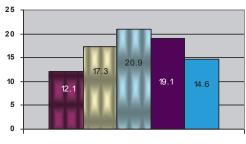
Site Life Calculations

Cells A-J have a total of 47.9 acres of liner system, which have 1,223,633 cubic yards of space remaining for refuse. At the 2020 airspace consumption rate of 167,641 cubic yards, the landfill's current lined system has 6 years of site life available, (estimated at 150,000 tons per year of refuse).

LEACHATE

A total of 14,556,035 gallons of leachate were pumped to the Gloversville-Johnstown Joint Wastewater Treatment Facility (GJJWTF) in 2020, a 4.5 million gallon decrease from the 19,055,518 gallons reported in 2019.

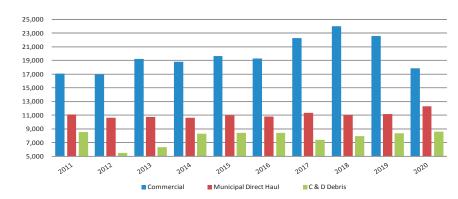
The direct pumping of leachate in the double contained HDPE leachate pipe line that runs to the wastewater facility replaced the previous method of disposal, which consisted of driving the leachate in a tanker truck. To date, over 347 million gallons have been sent to the GJJWTF.





TRENDS

Commercial / Municipal Direct Haul / C&D Debris - 10 Year History



- **Commercial Waste** in Fulton County decreased by 4,661 tons from the previous year, with 17,875 tons in 2020.
- **Municipal Waste** showed an increase of 1,135 tons, with a total of 12,317 tons in 2020.
- **C&D Debris** showed an increase of 229 tons in 2020, with a total of 8,593 tons.

Industrial Wet/Dry

The Industrial Waste category showed a decrease of 1,102 tons over the previous year. In 2020 there were 4,889 tons of combined wet and dry industrial waste reported, compared to 5,991.2 tons in 2019.

OUT-OF-COUNTY WASTE

The Out-Of-County Large Load category, reinstated in 2018, provides the municipal solid waste needed for a better percentage of dry to wet waste for operations, as well as the necessary revenue to support department programs. In 2020 almost 51,833 tons were reported in the large load category, a 1,188-ton increase from the 50,665 tons reported in 2019.

There were a total of 71,376 tons of Out-Of-County waste reported in 2020 (including the large load category), an almost 2,151 ton increase from 2019. Out-of-County loads accounted for over \$3.4 million in revenue in 2020 and \$35.7 million in revenue in the past 31.5 years.

GAS TO ENERGY

2020 continued as a successful year for electric generation at the DSW, including a five-year extension of the agreement with Aria Energy. The Landfill Gas-To-Energy plant has resulted in over \$2.4 million in revenue since production began. This can be attributed to the countless man hours spent by DSW staff expanding and maintaining the landfill's vast gas collection system.

A total of 8 gas wells were drilled in the spring with the assistance of the DSW gas crew. All of these endeavors bolster production by supplying a higher flow rate of good quality gas (50% methane or higher) to run the 3520 CAT engines at the landfill gas to energy plant.

Carbon credits were sold for a period covering 2017-June, 2020 for a total of \$182,427.



COMPOST

Incoming compost tonnage increased by 4 tons - with 3,091 tons reported in 2020, compared to 3,087 tons in 2019. This is mostly leaf and yard waste from municipalities and local landscapers. Limbs and branches are chipped and turned to advance the composting process. The finished compost is used for on-site vegetation and side slopes.

There were 985 tons of "Clean C&D Wood" gener-

ated in Fulton County in 2020, (none in 2019). This is run through the tub grinder, chipped, and used as landfill cover. No materials were reported in 2020 for Out-Of-County Clean C&D/Wood (7.5 tons in 2019).

There were also 140 tons of in-county concrete / millings /stone accepted, which is used for hard fill needs, as well as 41 tons of Out-Of-County millings, which generated \$1,037 in revenue.

TRANSFER OPERATIONS

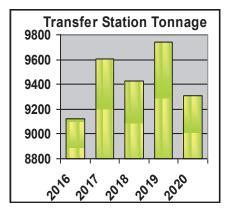
A total of 9,309 tons of residential refuse was reported for transfer stations in 2020, compared to 9,740 tons in 2019, a drop of 431 tons. However, there was an increase 8,883 in the number of vehicular loads (196,453 loads in 2020 compared to 187,570 in 2019) - as well as upticks in recycling and bulky metal.

Although total garbage tonnage was down for 2020, almost all other categories tracked at transfer stations increased. It could be speculated that, due to COVID-related issues, more residents were home and cleaning out closets, attics, old papers, or appliances. Throughout 2020 all transfer stations maintained regular schedules and services.

Materials of note are the 789 tons of metal (an increase of almost 90 tons from 2019); 856 tons of singlestream recycling (a 91-ton increase from 2019); 137 tons of miscellaneous recyclables, (including motor oil, tires and vehicle batteries); 156 tons of electronics (up from 141 tons in 2019) and 31 tons of textiles that were handled through the transfer stations in 2020.

New entrance signs were put up at seven stations and the structures were upgraded. In addition to annual maintenance projects at all transfer stations, a major project in 2020 involved the installation of a retaining wall at the East Fulton Street transfer station, with all work done in-house.

The DSW operates seven off-site transfer stations around Fulton County, as well as the Mud Road Transfer Station. Residents purchase permits from their municipality to dispose of garbage and recyclables.









The new retaining wall at the East Fulton Street Transfer Station (below) was built by DSW crews, including excavation (right); HEO Tom Hogan floats concrete for the pad (far right); Skilled Laborer Dustin Calhoun runs a soil compactor (bottom right).











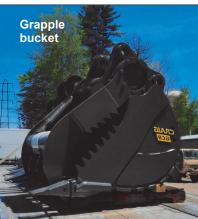
New Equipment

New equipment purchased in 2020 as Capital Projects totaled \$119,930. Major equipment purchases for the year include:

- Grapple bucket with thumb \$23,069
- ◆ Trailer for Demo \$6,279
- ♦ 8-ton Equipment trailer \$6,014
- ◆ Two 40-yard Open Top Roll Off Containers \$10,900
- ◆ Two Receiver Containers \$15,800
- Skid Steer and milling head \$57,871









CLEAN UP PROGRAM

The 26th year of the county sponsored Clean Up program was offered in the fall only for 2020, due to COVID-19 restrictions. Totals for the year were 145 tons of garbage in 60 loads, a 110-ton decrease from the 2019 total of 255 tons.

Also taken in were 35 tons of metal, 12 tons of electronics and 750 tire units for a total cost of \$15,627 to the municipalities.

Municipal Clean Up (by ton)				
2016	197			
2017	234			
2018	226			
2019	255			
2020	145			



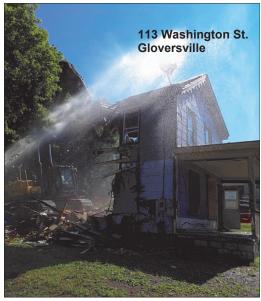
The Fulton County Demolition Team was formed in 2000 to fight blight and make removal of old buildings more economical. The DSW purchased an excavator and other equipment needed to demolish and remove dilapidated, municipal-owned structures.

A total of 128 structures have been demolished since the inception of the program. The average demolition cost per structure is \$2,800, plus the \$1,500 air monitoring fee, for an average of \$4,300 per structure.

2020 Demolitions

Six houses in Gloversville were taken down by the Fulton County Demolition Team in 2020. These municipally-owned buildings were demolished, then the debris was hauled to the landfill. Fill was brought in and the areas were graded. Structures razed include: 113 Washington St., 54 Forest St., 59 Bloomingdale Ave., 40 Steele Ave., 54 E. Pine St., and 215 S. Main St. The DSW also assisted the City of Gloversville with the clean up of 70 Division St.







2020 RECYCLING REPORT

Recycling Materials: Five-Year Comparison

Although Fulton County's incoming recycling remains fairly consistent (see the Singlestream row below), national and international recycling markets continued to be volatile in 2020 and \$38,828 was paid to

Oneida-Herkimer Solid Waste Authority (OHSWA) to process Fulton County's recycling. The best performing material of the year was bulky metals (appliances and white goods), which more than doubled in revenue.

MATERIAL	2016	2017	2018	2019	2020	Notes
SINGLESTREAM RECYCLING	243 tons \$557	2,296.7 tons \$77,330	2,361.3 tons (\$11,707)	2,381.4 ton (\$59,070)	2,377.9 tons (\$38,828)	2017 marked the transition to Singlestream Recycling. Changes in recycling markets resulted in an expense rather than revenue in 2020.
CORRUGATED CARDBOARD	488.1 tons	228.7 tons	182.4 tons \$17,441	68.4 tons \$2,450	90.4 \$6,820	This category now goes to Singlestream Recycling, with the exception of a small amount from commercial accounts.
BULKY METAL	876 tons	504.1 tons	547.7 tons \$87,052	602.8 tons \$68,779	1,010.4 \$146,976	Collected at all transfer stations. Freon units collected at the DSW location are included after Freon is removed.
VEHICLE BATTERIES	6.3 tons	9.1 tons	9.1 \$6,426	14.7 tons \$8,848	11.09 \$6,100	Vehicle batteries are collected from all transfer stations, no cost or chargeback. They are sold competitively.
TEXTILES	32.1 tons	28.3 tons	28.3 tons \$2,831	30.1 tons \$3,011	33.9 \$3,390	All transfer stations have textile drop boxes. FCDSW is paid \$100/ton for the materials collected.
ELECTRONICS	217 tons	229.6 tons	207.8 tons (\$26,000)	141 tons (\$19,127)	151.78 (\$22,782)	State law prohibits landfill disposal. FCDSW collects electronics and TVs at all transfer stations and palletizes for transport.
FREON UNITS	14.9 tons	16.8 tons	13.4 tons (\$2,694)	17 tons (\$2,768)	20.74 tons (\$2,280)	All Freon units come to the Mud Road TS. A \$5 per unit fee was re-instated in 2020 to cover disposal costs.
TIRES	113.5 tons	67.6 tons	104.2 tons	79.2 tons (\$17,369)	97.6 tons (\$16,426)	In 2020 tire disposal fees were \$16,426.
USED MOTOR OIL	25.5 tons	30.2 tons	26.2 tons	26.9 tons	28.8 tons	Collected from all transfer stations, DSW garage and LFGTE plant, it is used to heat the recycling facility and garage.
PROPANE TANKS	1.37 tons	1.59 tons	.48 tons	.91 tons	1.12 tons	These are taken to Bornt's Waste Metal in Gloversville at zero cost. They can't be included with bulky metal due to safety concerns.
FLUORESCENT BULBS	.37 tons	.21 tons	.33 tons	.38 tons	.33 tons	Fluorescent tubes are accepted at the DSW only. There is no cost to residents or any charge back to municipalities.
MIXED PAPER	1,002.6 tons	138.6 tons	23.1 tons \$15,963	22.3 tons \$0	20.5 tons \$308	This category now goes to Singlestream Recycling, with the exception of a small amount from commercial accounts.
GLASS	103.4 tons	29.6 tons	Include	d with Single	stream	Colored and clear glass jars and bottles.
PLASTIC	148.7 tons	75.1 tons	Include	d with Single	stream	Food and beverage grade plastic bottles and jugs. Plastic bags were discontinued when Singlestream started.
METAL	107.3 tons	36.1 tons	Include	d with Single	stream	Steel and aluminum cans.
DEPOSIT CONTAINERS	19.18 tons	2.04 tons	Include	d with Singl	estream	Deposit bottles are now processed as the material they are made of - glass, aluminum or plastic.

RECYCLING

2020 was unprecedented in Fulton County's recycling program, due to the impact of the COVID-19 pandemic. As businesses and schools shuttered, more residents stayed home - and the material stream changed. Commercial recycling dropped sharply (from 147 tons in 2019 to 82 tons in 2020) and curbside collections saw a modest drop in numbers. These were offset by an increase in transfer station recycling rates, resulting in an overall increase of 10 tons of material brought in, compared to the previous vear.

The Recycling Department remained in service as essential workers throughout the first wave of furloughs. But in the end of December, the DSW was forced to suspend curbside pick-ups, due to staffing shortages created by a mandatory 50% staff reduction. Recycling at



DSW crews work on the recycling facility.

transfer stations never slowed down, with higher tonnages (a 77.2 increase from

2019) and more trips to the stations.

As spring rolled in, schools and public venues started closing. Traditional educational activities for the Recycling Coordinator, such as school presentations, tours and participation in community events, such as the OFA Senior Picnic, were cancelled. Several DSW programs, the annual Latex Paint Exchange and Public Event "Borrow-A-Bin," were also suspended for the year. The focus was on informing residents about alternate safe disposal

(such as drying out latex paint).

With social distancing restrictions in place, the DSW focused more attention on social media this year, with the develop-

ment of a departmental Facebook
Page and participation in several
Zoom conferencing events. Accommodations were made so staff could
continue to work from home while
accessing emails and phone lines
remotely.

A major project in the Recycling Division in 2020 was a county-wide bulk mailing. The full-color brochure, designed in-house and printed locally, explains the basics of the county's Singlestream Recy-



Recycling Coordinator Dianne Woske sorts brochures for a county-wide bulk mailing in September.

cling Program and included FAQs for some specialty items. The 30,000 copies were delivered with the mail to households in all municipalities in Fulton County through an

EDDM (Every Door Direct Mail) campaign at the USPS

Another effort for public education was a two-sided flyer listing transfer station rules and recycling

program guidelines. These were distributed at transfer stations and given to municipal offices to hand out. One half of the costs for these educational materials will be reimbursed (with the payment in 2021) through a DEC Recycling Education Grant.

The Recycling Coordinator produced the 2021 Recycling Calendar and continued the cycle of submission for the annual NYSDEC grant.

Commercial Recycling

The multi-year agreement with OHSWA to process Fulton County's singlestream recycling excludes commercial recycling. This is primarily cardboard from businesses. Once it is received at Fulton County's facility, it is sorted, baled and marketed.

In 2020 there was a significant drop in this category, with 82.1 tons of commercial recycling reported, down from the 147.3 tons sold in 2019. Recycling from the Small Business and Non-Profit Recycling Program is included in these totals.



Small Business / Non-Profit Recycling Programs

A program aimed at increasing non-residential recycling rates is the **Small Business Recycling Program** - where a small business pays a \$25 annual fee, and then can bring all their recycling directly to the Mud Road Recycling facility.

A similar program is the **Non-Profit Recycling Program**, where non-profit groups like churches can bring recycling directly to the DSW. The \$25 registration fee is waived for this group.

A Look Back In History

TIPPING FEES (per ton)							
Category	2000	2010	2020				
Commercial, Industrial & Construction/Demolition	\$50.00	\$52.00	\$59.00				
Contaminated Soil	\$23.00	\$25.00	\$25.00				
County Transfer Haul	\$58.00	\$49.00	\$53.00				
Municipal Direct Haul	\$38.00	\$29.00	\$33.00				
Municipal C & D	\$25.00	\$20.00	\$25.00				
Municipal Sludge	\$40.00	\$30.00 & \$38.00	\$34.00 & \$44.00				
Municipal Clean-ups	\$40.00	\$45.00	\$50.00				
Transfer Station Recycling	\$12.50	\$12.50	\$20.00				
Curbside Recycling	\$25.00	\$25.00	\$30.00				
Commercial Recycling	\$10.00	\$10.00	\$40.00				

EFFICIENCIES 2020 Intermunicipal Benefits/Shared Services

- ♦ The Department of Solid Waste lent a packer truck to the Town of Mayfield
- ♦ The City of Johnstown assisted with paving at the East Fulton Street Transfer Station.
- ♦ Loaned flail mower to the Fulton County Highway Dept.
- Cleaned up demolition debris from 70 Division Street for the City of Gloversville.
- Moved equipment for Town of Northampton
- ♦ Lent an equipment trailer to the City of Johnstown













Thank You for Your Support

2020 Public Works Committee

Gregory Fagan, Chairman - Todd Bradt, Vice Chairman John Blackmon, Sheila Perry, Heather VanDenburgh, Jack Wilson, Gregory Young